

Applicant: The Detection Group

Test Report S/N: 45461783-R1.0

FCC ID: 2AK4V-DT-552

ISED ID 22517-DT552

EXHIBIT 11 -FCC RF EXPOSURE (MPE) REPORT

Prediction of MPE Limit 47 CFR § 2.1091

$$S_{20} = \frac{P_A G_N}{4\pi R_{20}^2}$$

$$S_C = \frac{P_A G_N}{4\pi R_C^2}$$

$$R_{c} = \sqrt{\frac{P_{A}G_{N}}{4\pi S_{I}}}$$

$$S_L = \frac{f}{1500} (mW/cm^2)$$

 S_{20} = Power Density of the Device at 20cm

 S_{l} = Power Density Limit

 S_c = Power Density of the Device at the Compliance Distance R_c

 $R_{20} = 20 \text{cm}$

R_c = Minimum Distance to the Radiating Element to Meet Compliance

 P_T = Power Input to Antenna

 P_A = Adjust Power

 G_N = Numeric Gain of the Antenna

f = Transmit Frequency

Transmit Duty Cycle = 100%

Use Group = General Popuation

Transmit Duty Cycle:	100.00	(%)
Tx Frequency (f):	906.00	(MHz)
RF Power at Antenna Input Port (P _T):	400.00	(mW)
Antenna Gain:	1.59	(dBi)
Numeric Antenna Gain (G _N):	1.44	(numeric)
Cable or Other Loss:	0.00	(dB)
Duty Cycle/Loss Adjusted Power (P _A):	400.00	(mW)

S _L =	0.604	(mW/cm ²)
S ₂₀ at 20cm =	0.115	(mW/cm ²)
$R_c =$	8.7	(cm)
s _c =	0.60	(mW/cm ²)

FCC ID: 2AK4V-DT-552	RESULT:	PASS
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